



VHF AND UHF MOBILE TRANSCEIVERS

IC-F1020 (45 W 136-174 MHz)

IC-F2020 (35 W 400-512 MHz)



The photo shows actual size.

● **Rugged construction**

The diecast aluminum chassis and polycarbonate front panel are resistant to impact.

● **45 W* of stable output power**

The one-piece aluminum chassis and heat sink provide effective heat dissipation, even at high duty cycles.

* 45 W for the IC-F1020 (VHF) and 35 W for the IC-F2020 (UHF).

● **Detachable front panel***

A detachable front panel provides numerous mounting possibilities and is simple to install in almost any vehicle.

* Optional remote kit and cable lengths available.

● **Programmable assign function**

Six switches provide simple operation yet their functions can be changed during programming, providing flexibility to suit your specific needs. (Limited front panel programming available.)

● **9600 baud data compatible**

● **CTCSS and DTCSS are standard**

● **Large, alphanumeric display**

● **32 channels standard; up to 160 optional**



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ADDITIONAL FEATURES

- Selectable transmit power (by channel)
- Memo banks
- Emergency call (DTMF code) with single or repeat function
- Tones + group code channels for 2-tone decode (optional)
- Automatic DTMF transmission linked to PTT
- Standard CTCSS with 51 frequencies (plus 1 programmable)
- Standard DCS with selectable polarity
- 7 DTMF channels for auto-dialing
- Up to 8 alphanumeric characters for memory name display
- 5 scan channel groups
- 2 priority channels
- Scan start and/or tone squelch as the microphone on hook function
- Priority channel selection and/or receive monitor as the microphone off hook function

- Normal scan and priority scan
- Power ON scan start
- Reverse burst equivalent
- Transpond capability (optional 2-tone decoder unit necessary)
- Programmable password security
- Programmable minimum level for audio volume
- Talk around function
- Time-out timer with penalty time
- Transmit lockout (CTCSS/channel busy)
- 2 selectable 'stun' functions (optional 2-tone decoder unit necessary)
- External I/O terminal socket (optional OPC-617 required) for PA, horn honk, dimmer, 9600 baud packet and PTT
- Advanced programming package for IBM® PC or compatible

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SPECIFICATIONS

GENERAL

• Frequency coverage	IC-F1020 : 136-155 MHz #01 146-174 MHz #02 IC-F2020 : 400-430 MHz #01 450-470 MHz #02 470-490 MHz #03 490-512 MHz #04
• Mode	: 16K0F3E
• Number of channels	: 32 (standard), 160 (optional)
• Channel spacing	: 25 kHz and 30 kHz
• Power supply requirement	: 13.6 V DC $\pm 15\%$ (negative ground)
• Current drain (at 13.6 V DC, typical)	High : 9 A (IC-F1020) 8 A (IC-F2020) Low : 4 A (IC-F1020) 4 A (IC-F2020) Squelched 700 mA Max. audio output 1.2 A

• Usable temperature range	: -30°C to +60°C -22°F to +140°F
• Frequency stability	: ± 5 ppm
• Dimensions (proj. not included)	: 150(W) x 50(H) x 160(D) mm 5 7/8 x 1 7/8 x 7 1/2 (D) in
• Weight	: 1.5 kg; 3 lb 5 oz

TRANSMITTER

• Output power	IC-F1020 : High 45 W Low 4.5 W IC-F2020 : High 35 W Low 2 W
• Max. frequency deviation	: ± 5.0 kHz
• Spurious emissions	: 70 dB min.
• Harmonic emissions	: 70 dB min.
• Hum and noise	: 45 dB typ. (IC-F1020) 45 dB typ. (IC-F2020)

RECEIVER

• Sensitivity for 12 dB S/N (typical)	IC-F1020 : 0.21 μ V IC-F2020 : 0.25 μ V
• Squelch sensitivity	IC-F1020 : 0.21 μ V IC-F2020 : 0.25 μ V
• Adj. channel selectivity	: 75 dB typ.
• Intermodulation rejection	: 70 dB min.
• Spurious response rejection	: 70 dB min.
• Hum and noise (typical)	IC-F1020 : -50 dB IC-F2020 : -45 dB
• Audio output power	: 4 W typ. at 10% distortion with a 4 Ω load

Measurements made in accordance with EIA/TIA-240D, EIA/TIA-316C.

All stated specifications are subject to change without notice or obligation.

OPTIONS

- **EX-1761 MEMORY EXPANSION UNIT**
Expands memory channels to 160 from 32.
- **OPC-617 ACC CABLE**
For external terminal connection.
- **RMK-1 SEPARATION KIT**
For front panel detachment installation. One of the following 3 cables must be used with this kit:
OPC-607 (3 m), OPC-608 (8 m) or OPC-609 (1.9 m).

- **SP-5 EXTERNAL SPEAKER**
Large speaker for excellent audio quality.
Input impedance: 4 Ω ; Max. input power: 5 W.
- **SP-10 EXTERNAL SPEAKER**
Compact and easy-to-install.
Input impedance: 4 Ω ; Max. input power: 5 W.
- **UT-80 2-TONE UNIT**
Provides 2-tone decoder capability.

- **UT-96 5-TONE UNIT**
Provides 5-tone decoder capabilities as well as 2-tone decoder capabilities via PC programming.
- **EX-1764/OPC-472/OPC-592 FIELD PROGRAMMING SOFTWARE AND CLONING CABLES FOR DEALERS ONLY**
- **OPC-591 CLONING CABLE**
For cloning between transceivers (dealers only).



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